DESIGNING SACRED INTERVENTIONS:

Religious Frameworks for Reduced Meat Consumption.

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Edinburgh Napier University

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Tommy Newbold
40662893

Abstract

This study explores the potential efficacy of using religious social technologies as frameworks for designing piecemeal interventions, to reduce meat consumption in a rationalised and disenchanted world. Meat consumption is a significant driver of climate change, and despite dietary shifts in some regions, global consumption remains high. This paper examines the role of sacredness in food choices and how religious practices such as Lent and Hinduism, historically shaped dietary behaviours. The research employs semi-structured interviews and a cultural probe, inspired by reflective religious practices to explore shifts in participants' perceptions of meat consumption.

Findings suggest that prompting reflection through interventions like daily consumption logging and creative activities, can reduce cognitive dissonance and increase empathy toward animals. This paper argues that by integrating mindfulness and ethical considerations, interventions inspired by religious social technologies may promote more sustainable dietary behaviours and reduce meat consumption, offering a potential pathway for addressing climate change.

Key words; Meat consumption, climate change, religious social technologies, sacredness, cultural probes, disenchantment, design interventions.

Introduction

The consumption of meat in the volumes and ways we currently do is creating irreversible changes in our world and contributing significantly to the challenges of mitigating climate change. Food is a deeply sacred and cultural thing, and whilst dietary shifts are beginning to occur in some places; the majority of the world still remains stubborn to change. One of the most impactful actions a person can take to reduce their carbon footprint and minimise their climate impact, is to decrease their meat consumption (Ivanova et al., 2020).

Religious institutions have traditionally provided structure for eating sustainably and in line with the land. However, we are now living in what Weber (1958) described as a "rationalised" and "disenchanted" world where the impact of the unexplainable has diminished. As we begin to realise the true crisis we are in, we are not turning to God for answers anymore, but to rationalisation. Is it possible that salvation lies between the two? In this study, we explored the efficacy of traditional religious social technologies as a framework for piecemeal interventions, to reduce meat consumption in a rationalised world.

Contextualisation

The impact of meat overconsumption

Meat remains a central component of diets in 2023, with over 80 billion animals slaughtered for consumption annually, approximately ten animals per person (FAO, 2024; Ritchie, Rosado and Roser, 2024). Overconsumption of meat, particularly of red and processed meats, has been shown to lead to an increased risk of non-communicable diseases, such as type 2 diabetes, obesity, coronary heart disease, and cancer (Bouvard *et al.*, 2015).

Animal products can account for 56% greenhouse gas emissions from the food sector, use 83% of available farmland, and provide only 18% of human calories. The conversion of land for agriculture and livestock has led to deforestation, habitat loss, biodiversity decline,

freshwater depletion, and soil degradation, which is further exacerbating climate disruption ((Poore and Nemecek, 2018; Sage, Quieti and Fonte, 2021).

The EAT-Lancet Commission (2019) has proposed a "Planetary Health Diet" to sustainably feed a projected 10 billion people by the year 2050. This would limit meat intake to 14 grams of red meat and 29 grams of poultry per day (Willett *et al.*, 2019). Failing to meet these guidelines could lead to greenhouse gas emissions rising in line with food consumption, exceeding the carbon budget required to limit temperature increases to 1.5–2°C, even if fossil fuel extraction ceased (Clark *et al.*, 2020).

However, the EAT-Lancet diet has faced criticism, particularly over its affordability. The cheapest version costs a global median of $2.84 per day, exceeding the per capita income of 1.58 billion people (Hirvonen *et al.*, 2020). Additionally, concerns have been raised about the transparency of the data, assumptions, and the reliability of the health and environmental claims (Stanton, 2024), suggesting the risks of significantly reducing meat consumption may not be fully understood.

How meat overconsumption became the norm

Weber's theories on disenchantment and rationalisation offer valuable frameworks for understanding the overconsumption of meat (Ritzer, 2024). Many people enjoy eating meat, but struggle with the moral implications of killing animals, creating a 'meat paradox' which leads to cognitive dissonance between the food on our plates and its origins. There are three primary ways people resolve this conflict: 1. By choosing to stop eating meat and eliminating the conflict entirely (Povey et al., 2001); 2. By failing to recognise that animals are killed to produce meat, via ignorance or tactical denial (Hoogland et al., 2005) and 3. By temporarily reducing their perception of the moral status of the animal during consumption (Loughnan et al., 2010).

One way this dissonance is enabled, is through the disenchantment of meat. Jeske (2024) identifies four interrelated mechanisms of this disenchantment: commodification, rationalisation, distancing/alienation, and cultural shifts. These mechanisms transform meat from a socially and morally embedded product, into an industrial commodity, reflecting broader trends in modern capitalism and secularisation. The public is physically distanced from the realities of animal slaughter (through urbanisation and rural retreat), visually (through pre-packaged, ultra-processed foods and lack of unprocessed meat), and verbally (through avoidance of animal-specific language, such as 'bacon,' 'nuggets,' 'steaks,' or 'bon-bons') (Hopkins and Dacey, 2008). The rationalisation of meat production involves mechanised processes that strip it of ritualistic or sacred significance. This shift is a product of modernity, where the efficiency required for overconsumption disenchants the processes by which goods are obtained. (Ritzer, 2024). As a result, we treat the sale of commodities, including meat, as neutral transactions within a political economy, detached from moral or ethical considerations.

Previous interventions in meat consumption

Historically, religion has played a significant role in shaping people's lives, providing frameworks for everything, from work to social interactions, to dietary practices (Stavrova, Fetchenhauer and Schlösser, 2013). This can be understood as an adherence to social norms, interacting with a unique social technology which encourages enchantment and the belief in unrationalised things.

Whilst this governing of people may rely on enchanted thoughts, they are often derived from very real and rationalised problems. Obvious examples can be found in some of the worlds larger religious practices. Christianity's Lenten meat abstention has both spiritual and practical roots and relies on compliance through a sense of the greater good. It also aligns with the tangible threat of early spring food scarcity, helping to preserve livestock for farming and dairy needs (Grumett, 2011).

Hinduism has long been a force for reducing meat consumption, with India in 2021 consuming just 5.69 kg of meat per capita per year, compared to the United Kingdom's 82.26 kg (FAO, 2024). Hinduism advocates for the raised moral value of animals with core tenets of nonviolence towards other life forms and meat as a pollutant to the body (Campbell, Prosser and Whitmarsh, 2022).

However, it is important to note that dietary restriction is a tenet of many other religions and cultural traditions, which could provide new technologies for the curbing of overconsumption. Further examples include Kosher diets in Judaism, Non-Violence in Jainism, eating raw foods in MOVE. (Heiman, Gordon and Zilberman, 2019; Evans, 2020; Miller and Dickstein, 2021)

Faith	Practice	Potential Social Technology
Christianity	Lenten Fasting	Call to A Greater Good
Islam	Halal/Haram Foods	Submission to a Higher Power
Hinduism	Worship of Animals	Increased Moral Status of Animals
Judaism	Kosher Diets	Submission to Personal Betterment
Jainism	Ahimsa, Sammā-vācā	Practicing nonviolence toward animals
MOVE	Community Veganism	Group Education and participation

Table 1 Religious traditions and their potential social technologies

Methodology

To investigate the efficacy of religious social technologies as frameworks for piecemeal interventions aimed at reducing meat consumption, this study employed two complementary methods: semi-structured interviews and a cultural research probe. These methods were designed to explore sacredness as it manifests in everyday life, and to evaluate reflective practices inspired by religious traditions.

Interviews

To understand how sacredness might still manifest itself and to find areas with potentially exploitable connections to sacredness, my research team conducted six semi-structured interviews. Sacredness is a broad subject that manifests itself uniquely in individuals' lives. However, in this study we are choosing to define it as something metaphysical which seems to add additional value, happiness, or consideration to their eating. As eating is a universal experience, we believed it would be valuable to explore a wide range of perspectives. Thus, the only factors that deemed someone ineligible for the interview were if they refused informed consent or were unable to give informed consent to the interview.

To avoid leading participants into certain beliefs and to avoid any manifestation of the hawthorn effect, we ensured that all interviews took place in an environment surrounded by food. Examples of interview locations included restaurants, dinner parties, cafes, and break rooms. While there may have been an impact on the perceived importance of food, this remained consistent across all interviews. Furthermore, we ensured that the interviews took place within regular eating hours of 12:00-20:00 on days between 4th and 9th of October 2024. To ensure consistency across the six separate interviews, a three-step framework was established prior.

Step 1: Consent

Interviewees were informed of the topic of the interview, how it would be lead, how it would be recorded, and what it would be used for to ensure that they were fully informed before consenting to the interview. Participants were also asked if they had any further questions about the project before conducting the interviews.

Step 2: Profile Questions

Each interview started with a short survey for both the interviewer and interviewee regarding their name, age, occupation, clothing, location, time of interview, how we met and if they have any dependants in their life. This allowed us to reflect on and adjust any insights that may be incorrectly made or generalised if there were other corroborating factors between the interviewer and interviewee.

Step 3: Check point questions

Finally, a semi-structured interview was conducted with interviewers having four checkpoint questions to ask in 7–8-minute intervals, with the total interview taking no longer than 30 minutes. Interviewers were encouraged to ask follow-up questions between check point questions, such as asking about specific relationships with individuals they were eating with and how they thought the other may consider the sacredness of the meal.

The four checkpoint questions asked were: "What is your relationship with food like? Where did this relationship originate? What was the last restaurant you ate at. Why did you choose that restaurant and what did it mean to you?" These questions were chosen to frame the interview around how sacredness of food at home may relate to restaurant choices, as we believed that there may be a consistent difference in the choices people make at home compared to in a restaurant.

This semi-structured approach was chosen to allow for flexibility, acknowledging that sacredness may encompass both traditional religious connotations and more secular, everyday experiences as explored by Varadarajan, (2010)

As this was a purely qualitative study, a thematic analysis was used to interpret the data. This allowed us to look for any recurrent themes between interviewees and allowed flexibility which worked well with our semi-structured interviews. This process was conducted using the framework suggested by Sage Publishing (Byrne, 2016).

Folds for Thought: A research probe for the unbutchering of animals

A cultural probe was used to explore the efficacy of religious social technologies, as piecemeal interventions to increase the perceived moral status of animals and reduce meat consumption. Cultural probes, first introduced by (Gaver, Dunne and Pacenti, 1999), are recognised for their ability to elicit rich, contextual data, while allowing participants the freedom to explore their own emotions by engaging them in creative and introspective tasks. These probes are particularly suited for exploring personal values and behaviours, making them an ideal method for this study, which focused on participants' reflections on their dietary habits and relationships with the lives of animals. Hinduism served as inspiration for these probes with an attempt to raise users' perception of the moral status of animals through meditation, non-violence and reflection.

A probe kit was distributed to six participants for a six-day period. Each kit included:

Instructions: Detailed guidelines outlining the process of logging meat consumption and engaging in reflective exercises.

Logbook: A compact diary, featuring pictograms of animals (beef, chicken, pork, and fish) to record consumption. The use of visual symbols, rather than text, was inspired

by the potential of visual media to foster deeper emotional engagement and reduce habituation to textual cues (Thoring, Luippold and Mueller, 2013)

Origami supplies: Square coloured papers and instructional videos for folding origami representations of the animals consumed. This activity served as a tactile and meditative reflection on the connection between meat consumption and the animals' lives, aligning with the generative qualities of probes to gain personal insights through creative tasks (Sanders and Stappers, 2014).

Participants were instructed to log their consumption of specific animals in the logbook throughout the day. At the end of each day, they were asked to engage in a reflective exercise using the coloured papers. For each animal consumed, participants were encouraged to express their thoughts creatively (e.g., through drawings, notes, or doodles) before folding the paper into an origami animal. This act of "unbutchering" aimed to reconnect participants with the origin of their food, utilising the ambiguity and openness characteristic of cultural probes, to foster introspection and novel perspectives (Gaver, Dunne and Pacenti, 1999).

Figure 1; Contents of Probe Kit

Data Collection and Analysis

At the end of the study, participants returned the completed probes. The data collected included:

1. Logbook entries detailing the frequency and types of animals consumed.
2. Reflective notations and creative expressions on the origami papers.
3. Brief post-study interviews to gather additional insights into participants' experiences.

Data were analysed thematically, focusing on patterns in meat consumption, emotional responses, and shifts in attitudes toward animals. The origami artifacts and accompanying reflections were coded to identify recurring themes, using a grounded theory approach to ensure sensitivity to participants' subjective experiences (Thoring, Luippold and Mueller, 2013).

By combining sensory engagement (folding origami) with reflective practices, the method sought to deepen participants' awareness of their consumption patterns, without inducing defensive responses often associated with exposure to graphic imagery. Additionally, the playful and open-ended nature of the probes was designed to reduce resistance and encourage meaningful engagement.
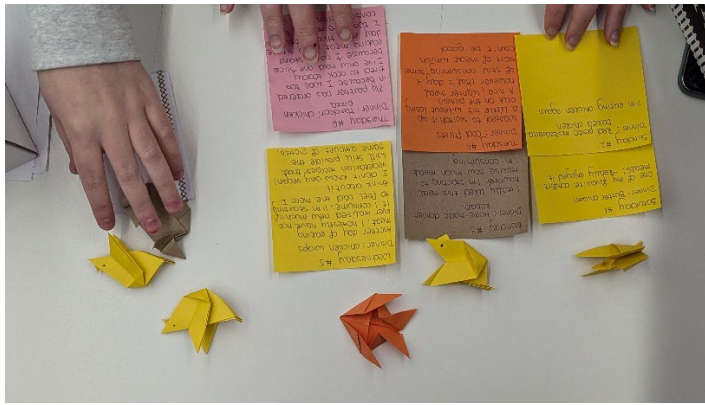
Figure 2; (Above) Thematic analysis of responses

Figure 3; (Right) Folded origami responses

Results

Interviews

The interviews revealed two contrasting perspectives on the sacredness of food: utilitarian approaches focused on health and nutrition, and more traditional views tied to personal, familial, and cultural practices.

Non-Sacred Perspectives

Participants who described food as "not sacred", commonly associated it with functionality rather than celebration. For example, Participant C characterised food as a means of "fuelling the machine," prioritising nutritional content over its origin or preparation. When prompted further, C expressed anxiety about food choices, emphasising a preference for meals that align with specific dietary goals.

Similarly, Participant E highlighted nutrition as the central factor in their food decisions, citing the need to consume 110g of protein daily to maintain fitness. Chicken was preferred due to its perceived health benefits, being "healthier than beef and pork, which can

be fatty and contain nitrates." While initially dismissive of the sacredness of food, both participants acknowledged that caring for their health through diet might represent a form of sacred self-care, despite limited attention to the food's source.

Sacred Perspectives

Conversely, participants who considered food sacred often linked it to meaningful rituals and personal relationships. Participant F recalled the significance of setting the dinner table during her childhood and described a specific Wednesday night tradition where her father prepared fresh fish from local fishermen. This ritual connected her family to their Danish heritage, as her father viewed the act as a way of honouring his lineage of fishermen. For F, these practices imbued food with personal and cultural meaning, extending into her adult life. She described food as a means of expressing compassion and self-care, stating that while it is not always enjoyable, it remains a source of fulfilment and purpose.

Similarly, Participant G emphasised the sacredness of food in maintaining and strengthening personal relationships. G recounted a recent occasion where she chose a restaurant specifically to please her partner, even though it was not her preference, explaining, "It was my way of showing him that I care about him, and that this food we were sharing and the fact we were in the moment together was more important to me." Food also played a central role in her connection with family members living abroad. G noted that during visits, her family would often take her out for meals or restock her groceries despite her protests, reflecting their desire to support her from afar. These acts of care reinforced food as a symbolic medium for love and connection in G's life.

Probes

Of the six probes distributed, five were successfully returned, with participants providing short, written reflections and origami artifacts. From the logbooks it appears that the majority of participants consumed meat daily, with only two participants abstaining on one of the six days. Reflections throughout the week indicated that participants may have

initially underestimated their meat consumption, with the probe prompting greater awareness of their actual intake.

Early reflections predominantly focused on descriptive accounts of the meals consumed. As the days progressed, participants began to include justifications for their dietary choices. Their responses suggest a growing awareness of the habitual and situational factors influencing their consumption, accompanied by internalised guilt, indicating a possible erosion of the cognitive dissonance between meat and animals.

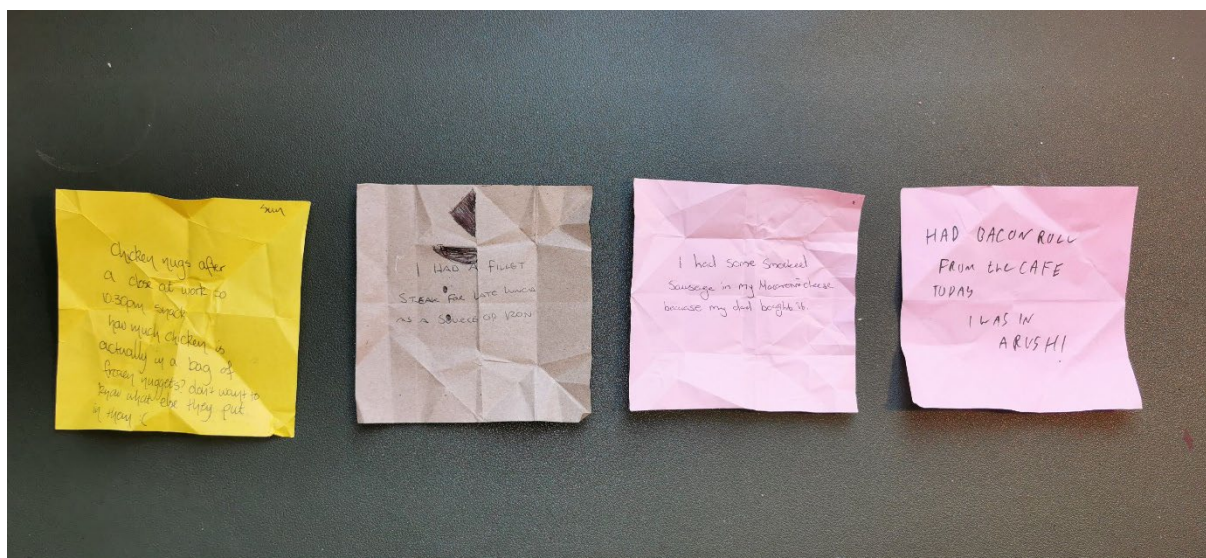*Fig 4; (Above) Descriptive accounts of meals early in the week*

Figure 5; (Above) Justifications of meat consumption

By the middle of the week, participants started referencing animals by their names rather than the generic terms for meat, shifting from "pork and beef" to "pigs and cows." This linguistic shift reflects an increased emotional connection to the animals and the beginning of a re-enchantment with the source of their food. Reflections toward the end of the probe expressed heightened concern for animal welfare, with participants exhibiting greater empathy and contemplation about the lives of the animals consumed.
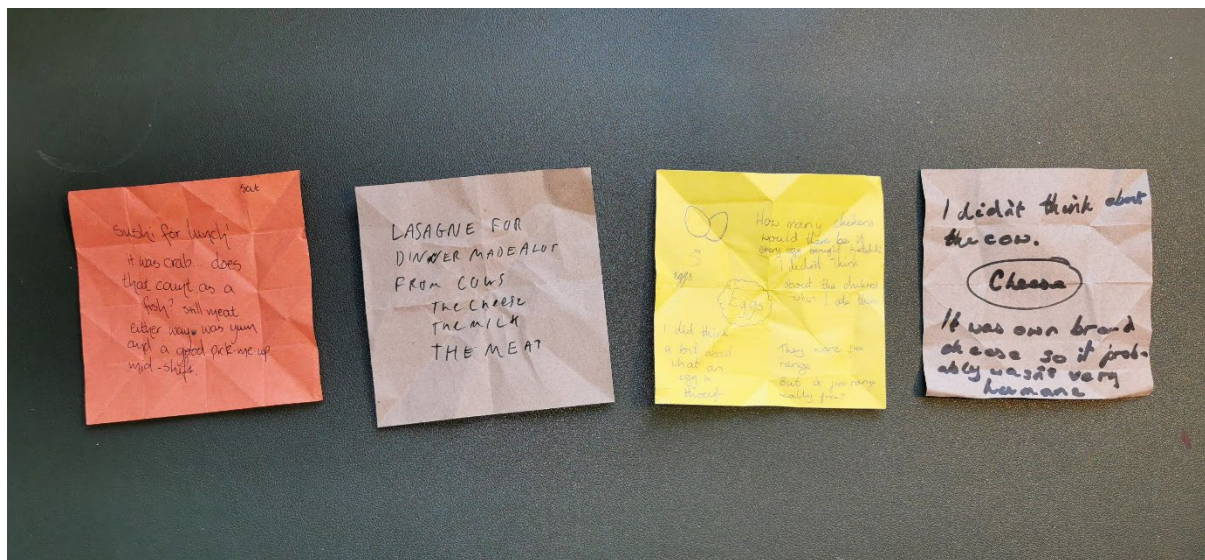

Figure 6; (Above) Use of animal names "Cow" "Pork" in reflections

By the end of the probe, two participants explicitly wrote commitments to reduce their meat consumption, citing discomfort with the amount or quality of meat they had eaten. This sentiment was accompanied by a marginal reduction in meat consumption during the final days of the study. Reflections transitioned from meal-focused descriptions to more ethically and emotionally charged considerations of the animals and their slaughter, indicating a potential for sustained behavioural change.
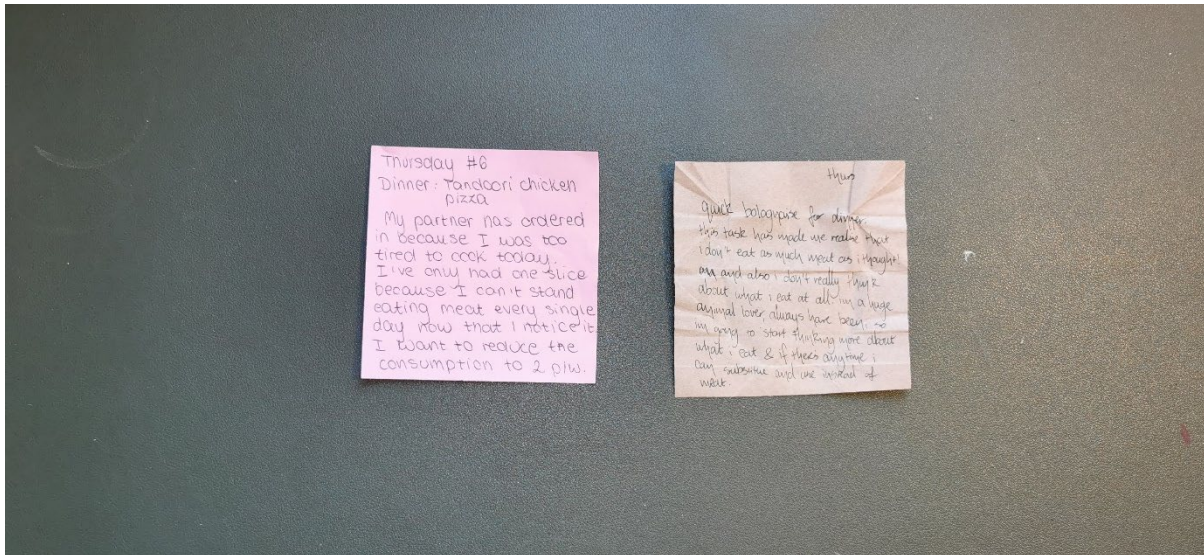
Figure 7; (Above) Commitments to reduce meat intake.

Discussion

These findings support the potential efficacy of piecemeal interventions inspired by religious social practices, particularly in fostering reflective and ethical engagement with food. Both interviews and probes indicated that prompting reflection can erode cognitive dissonance between meat consumption and its ethical implications. The probes encouraged participants to confront the reality of their consumption habits, while the interviews revealed how intentional rituals and self-care practices imbue food with greater meaning. Religious practices such as Lent leverage similar reflective mechanisms, suggesting that structured interventions focusing on mindfulness and awareness, could be effective.

The probes' success in re-enchanting participants with the origins of food matches the sacredness emphasised in the interviews. Designing interventions that frame food in terms of relational, cultural, or ethical values, could deepen participants' emotional connection to their choices. For example, reframing meat reduction as an act of compassion (toward animals, the environment, or oneself) mirrors the sacred perspectives observed in the interviews.

The contrasting perspectives in the interviews suggest that designed interventions must accommodate diverse motivations, from utilitarian to sacred. For non-sacred participants, interventions might focus on health and sustainability as entry points, while for sacred participants, framing food choices as acts of love, care, or cultural preservation could be more effective. Both will require a piecemeal facet enabling ownership over the interventions and a deepening of connection to the practice.

Conclusion

By integrating reflective practices and emotional engagement, piecemeal interventions inspired by religious social practices show promise as frameworks for design interventions. The findings suggest that fostering mindfulness, leveraging emotional connections, and embracing gradual, context-sensitive approaches are key to designing effective interventions. Further research could explore how to tailor these strategies to different cultural and individual contexts for greater impact as well as endpoints for design integration. It will be critical to explore other sources of inspiration and operate with a larger sample size of participants for longer periods, to see if interventions have made lasting changes.

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